

What is claimed is:

1. A vision system having a variable field of regard, comprising:
  - a housing having a lens assembly;
  - a movable sensor assembly located within the housing;
  - a radiation detector connected to one end of the sensor assembly; and
  - an actuator connected to the housing and able to move the sensor assembly in the housing and thereby move the radiation detector in an image plane relative to the optical axis of the lens assembly.
2. The system of claim 1, wherein the radiation detector is an infrared detector.
3. The system of claim 1, wherein the actuator contacts one end of the sensor assembly.
4. The system of claim 1, wherein the sensor assembly further comprises a flange on an outer portion of the sensor assembly for contact with motion of the actuator.
5. The system of claim 1, further comprising:
  - a spring connected to the housing for exerting force against one end of the sensor assembly.
6. The system of claim 5, further comprising:
  - a projection connected to the housing and interfit with the sensor assembly to prevent rotation of the sensor assembly in the housing.
7. The system of claim 6, wherein a portion of the sensor assembly interfits with the housing projection.

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8. The system of claim 5, wherein the actuator remains in contact with the sensor assembly as a result of the spring exerting force against the sensor assembly.

9. The system of claim 1, wherein the sensor assembly is vertically movable within the housing.

10. The system of claim 1, wherein the lens assembly is connected at one end of the housing and positioned such that a radiation sensitive area of the detector is alignable within an image plane of the lens assembly.

11. The system of claim 10, wherein the actuator is movable to contact the sensor assembly and move the sensor assembly in a vertical direction thereby moving the detector in a vertical direction within an image plane of the lens assembly.

12. The system of claim 1, wherein the actuator is not in contact with the sensor assembly.

13. The system of claim 12, wherein the actuator is one of a pneumatic, fluid pressure, and electromagnetic type actuator.

14. The system of claim 12, wherein the actuator is able to move the sensor assembly in the housing without contacting the sensor assembly.

15. The system of claim 1, wherein the sensor assembly is a vertically oriented cylinder.

16. The system of claim 1, wherein the sensor assembly is cylindrical-shaped.

17. A method for controlling the field of view of a vision system, comprising the step of:

moving a radiation detector as part of a driver vision enhancing system in a vertical direction within an image plane of the driver vision enhancing system.

18. The method of claim 17, wherein the radiation detector is connected to a sensor tube assembly and the moving step further comprises:

moving an actuator to contact a sensor tube assembly causing the sensor tube assembly to move in a vertical direction and thereby move the radiation detector.

19. The method of claim 18, wherein the actuator moving step further comprises:

compressing a spring biasing the sensor tube assembly in a vertical direction.

20. The method of claim 19, wherein motion of the actuator in contact with the sensor tube assembly compresses the spring.

21. The method of claim 18, wherein the sensor tube assembly is mounted within a housing having a vertically extending projection interfit with the sensor tube assembly and the actuator moving step further comprises:

vertically moving the sensor tube assembly along the housing projection without allowing rotation of the sensor tube assembly.